Lincolnweld® 888™

Lincolnweld® 888™ is a basic flux designed for joining mild steel and low alloy steels for critical applications that require excellent mechanical properties with robust low temperature fracture toughness. 888™ is designed to be used for as welded and stress relieved applications.

It has optimal slag removal in deep groove and narrow gap applications. 888™ is designed to give robust cap pass impact toughness and is engineered to handle multiple arc applications, up to 5 arcs, with ease. It meets the H4 diffusible hydrogen level when used with solid wires.

Advantage Lincoln

- Best-in-Class deep groove & narrow gap slag removal.
- H4 diffusible hydrogen levels per AWS A4.3-93.
- Moisture resistant packaging.
- Excellent operation with multiple arcs.
- Robust impact toughness, even in cap passes.

Flux Characteristics

- Fluoride basic flux system.
- Diffusible Hydrogen <4mL/100g weld deposit.
- Boniszewski Basicity Index: 2.2.

Typical Applications

- Offshore
- Pressure Vessels
- Wind Towers
- Structural Fabrication
- Shipbuilding

Recommended Electrodes (AWS Classification)

Mild Steel Electrodes (per AWS A5.17-97)

L-50 (EM13K)
L-56 (EH11K)
L-S3/LNS 133U/L-50M (EH12K),
L-61 (EM12K)
LA-71 (EM14K)

Low Alloy Electrodes (per AWS A5.23-97)

L-70 (EA1)
LA-75 (ENi1K)
LA-82 (EF2)
LA-84/LNS 164 (EF3)
LA-85/LNS 165 (ENi5)
LA-90 (EA3K)
LA-100 (EM2)
LAC-Ni2 (ECNi2)
LAC-M2 (ECM2)
LAC-B2 (ECB2)

FLUX COMPOSITION

$SiO_2 + TiO_2$	$CaO + MgO$	$Al_2O_3 + Mn_xO_y$	CaF_2
20%	35%	20%	25%

PACKAGING

Description	Ordering Information
50 lb. (23 kg) Plastic Bag	ED031596
50 lb. (23 kg) Plastic Pail	MTO*
2500 lb. (1134 kg) Plastic-Lined Bulk Bag	MTO*

* Made To Order - Contact District Office (1000 lb. minimum order)

MECHANICAL PROPERTIES – Welded per AWS A5.17 (Carbon Steel Electrodes)

Wire	Weld Condition	Yield Strength ksi (MPa)	Tensile Strength ksi (MPa)	Elongation (%)	Charpy V-Notch ft•lbf (J)	Charpy V-Notch @ °F (°C)	AWS Class per AWS A5.17
L-50	As-welded	62 (430)	78 (540)	31	90 (122)	-80° (-62°)	F7A8-EM13K-H4
L-50	Stress-relieved	53 (370)	74 (510)	32	138 (187)	-80° (-62°)	F6P8-EM13K-H4
L-56	As-welded	74 (510)	88 (610)	29	52 (71)	-80° (-62°)	F7A8-EH11K-H4
L-56	Stress-relieved	59 (410)	79 (540)	32	87 (118)	-80° (-62°)	F7P8-EH11K-H4
L-61	As-welded	61 (420)	75 (520)	31	89 (120)	-60° (-51°)	F7A6-EM12K-H4
L-S3	As-welded	65 (450)	82 (570)	31	106 (144)	-80° (-62°)	F7A8-EH12K-H4
L-S3	Stress-relieved	54 (370)	74 (510)	33	122 (165)	-80° (-62°)	F6P8-EH12K-H4
LA-71	As-welded	75 (520)	89 (610)	28	50 (68)	-60° (-51°)	F7A6-EM14K-H4
LA-71	Stress-relieved	60 (410)	78 (540)	32	99 (134)	-80° (-62°)	F7P8-EM14K-H4

MECHANICAL PROPERTIES – Welded per AWS A5.23 (Low Alloy Electrodes)

Wire	Weld Condition	Yield Strength ksi (MPa)	Tensile Strength ksi (MPa)	Elongation (%)	Charpy V-Notch ft•lbf (J)	Charpy V-Notch @ °F (°C)	AWS Class per AWS A5.23
L-70	As-welded	74 (510)	87 (600)	29	45 (61)	-40° (-40°)	F7A4-EA1-A2-H4
L-70	Stress-relieved	69 (470)	83 (570)	31	54 (73)	-40° (-40°)	F7P4-EA1-A2-H4
LA-75	As-welded	68 (470)	84 (580)	31	90 (122)	-80° (-62°)	F7A8-ENi1K-Ni1-H4
LA-82	As-welded	99 (680)	113 (780)	23	52 (70)	-80° (-62°)	F10A8-EF2-F2-H4
LA-82	Stress-relieved	87 (600)	102 (700)	26	58 (79)	-60° (-51°)	F9P6-EF2-F2-H4
LA-84	As-welded	92 (630)	105 (720)	23	57 (77)	-80° (-62°)	F9A8-EF3-F3-H4
LA-84	Stress-relieved	84 (580)	98 (670)	26	25 (33)	-60° (-51°)	F8P6-EF3-F3-H4
LA-85	As-welded	78 (540)	92 (630)	26	58 (79)	-60° (-51°)	F8A6-ENi5-Ni5-H4
LA-85	Stress-relieved	73 (500)	87 (600)	29	34 (46)	-60° (-51°)	F7P6-ENi5-Ni5-H4
LA-90	As-welded	89 (610)	102 (700)	26	41 (56)	-60° (-51°)	F9A6-EA3K-A3-H4
LA-100	As-welded	98 (680)	109 (750)	24	35 (48)	-40° (-40°)	F10A4-EM2-M2-H4
LA-100	Stress-relieved	99 (680)	110 (760)	25	38 (52)	-20° (-29°)	F10P2-EM2-M2-H4
LAC-B2	Stress-relieved	76 (520)	90 (620)	24	60 (81)	-40° (-40°)	F8P4-ECB2-B2-H8
LAC-M2	As-welded	116 (800)	130 (890)	21	40 (55)	-80° (-62°)	F12A8-ECG-G-H8
LAC-Ni2	As-welded	78 (540)	92 (630)	20	42 (57)	-80° (-62°)	F8A8-ECNi2-Ni2-H8
LAC-Ni2	Stress-relieved	70 (480)	84 (580)	27	47 (64)	-100° (-73°)	F7P10-ECNi2-Ni2-H8

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

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Subject to Change — This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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